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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
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ART UNIT	PAPER NUMBER
4193	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/595,306	GOMO, OYSTEIN	
	Examiner	Art Unit	
	QUINTIN LATHAN JR	4193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 April 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *07/06/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 4-6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Lampotang et al. (US Patent 5779484)

As per claim 4, Lampotang teach a simulator for simulation of an infant, comprising a torso containing at least one lung (a manikin with a simulated lung) (col. 6, lines 26-27), with the option of altering the compliance of the lung(s) (the ability to control lung compliance by computer without manual intervention) (col. 30, 34-35), characterized in that the lung or. Lungs is/are arranged between two plates in the torso (One end of the rack is attached to the top plate of the bellows) (col. 16, line 31), and that the spacing of the plates or their resistance against moving apart can be altered (along conduit there is a controllable bronchial resistance means) (col. 17, 65-66).

As per claim 5, Lampotang teach simulator where the lower plate is fixed, while the upper plate (fig. 2, element 120 and 120') is movable.

As per claim 6, Lampotang teach a simulator where a pneumatically driven mechanism pulls the upper plate (as the plate moves from its rest position to position 120') (col. 16, lines 43-45) down towards the lower plate.

As per claim 9, Lampotang teach a system for controlling different pneumatic functions in a patient simulator, characterized in that a pressure which is representative for each individual actuator (a means for actuating the bellows between expand and contracted states depending upon a time- and event-based script) (col. 5, lines 33-35) is measured and the filling is stopped when a pre-determined pressure is reached, a pressure sensor (a pressure sensor situated inside the bellow) (col. 5, lines 52-53) for measuring the representative pressure being disposed at a distance from the actuator and a throttle (a least one mass flow controller capable of directing the gas into the bellows) (col. 5 lines 38-39) being disposed upstream of the pressure sensor for neutralizing the pressure difference between the pressure sensor and the actuator.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-3 rejected under 35 U.S.C. 103(a) as being unpatentable over Lampotang et al. (US Patent 5779484) in view of Owens et al. (US Patent 6910896).

As per claim 1, Lampotang teach a medical patient simulator, in particular a simulator for simulation of an infant, comprising a torso containing at least one artificial lung (a manikin with a simulated lung) (col. 6, lines 26-27), a chest skin (small speakers is distributed below the skin of the manikin) (col. 26, lines 42-44) placed at least partially on the outside of the torso,

Lampotang et al. does not teach chest skin that comprises means of pulling down the chest skin of the torso in an area corresponding to an area where such retractions occur on a human

Owens et al. teaches a inhalation mechanism characterized in that it also comprises means of pulling down the chest skin of the torso in an area corresponding to an area where such retractions occur on a human being (during inhalation, the diaphragm in the human body is forcefully lowered creating a negative pressure in the lungs) (col. 1, lines 37-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include means of pulling down the chest skin of the torso in an area corresponding to an area where such retractions occur on a human as taught by Owens et al. for the purpose of enhancing the apparatus of Lampotang et al. for accurately simulating the respiratory cycle of a human.

As per claim 2, Owens et al. teach the chest skin has an elastic strap (Fig. 1, the chest elastically deforms, the diaphragm is forcefully lowered) attached to or integrated into the inside of the skin approximately in the middle of the area where retractions occur.

As per claim 3, Owens et al. teach a pneumatic mechanism is designed to pull the strap in synchronous fashion with the lung(s)' raising and lowering of the chest to produce the desired cavity in the chest skin (fig. 1, air enters nose and mouth, the chest elastically deforms, the diaphragm is forcefully lowered) also see (fig. 2, air exits the nose and mouth, the chest returns to its undeformed position, the diaphragm is relaxed).

4. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lampotang et al. (US Patent 5779484) in view of Smith-Whitley et al. (US Patent 6077083).

As per claim 7, Lampotang teach a medical patient simulator, in particular a simulator for simulation of an infant, comprising a torso (a manikin with a simulated lung) (col. 6, lines 26-27),

Lampotang et al. does not further teach that the torso comprises at least two actuators arranged on the right and left sides, respectively, of the backside of the torso, which actuators are designed to be operated in the following modes:

for simulation of normal muscle movement, alternate and regular activation of the actuators on the left and right sides, for simulation of muscle spasms; rapid and irregular activation of the actuators on the left and right sides, for simulation of defibrillation; rapid activation of both actuators simultaneously, once for each defibrillation

Smith-Whitley et al. teaches a doll were the torso comprises at least two actuators (a simulated organ in the form of a spleen is normally disposed beneath the ribcage) (col. 3, lines 1-2) also see (the doll further includes a simulated lung which is supported beneath the ribcage in the body) (col. 3, lines 6-7) arranged on the right and left sides, respectively, of the backside of the torso (2), which actuators (23, 24) are designed to be operated in the following modes:

(the actuator for actuating the spleen to demonstrate normal and diseased conditions) (col. 4, lines 44-46) for simulation of normal muscle movement, alternate and regular activation of the actuators on the left and right sides, for simulation of muscle spasms; rapid and irregular activation of the actuators on the left and right sides, for simulation of defibrillation; rapid activation of both actuators simultaneously, once for each defibrillation

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a torso comprising at least two actuators arranged on the right and left sides, respectively, of the backside of the torso, which actuators are designed to be operated in the following modes:

for simulation of normal muscle movement, alternate and regular activation of the actuators on the left and right sides, for simulation of muscle spasms; rapid and irregular activation of the actuators on the left and right sides, for simulation of defibrillation; rapid activation of both actuators simultaneously, once for each defibrillation as taught by Owens et al. for the purpose of enhancing the apparatus of

Lampotang et al. for controlling and moving more that one organ and/or muscle that are apart of the human respiratory cycle.

As per claim 8, Smith-Whitley et al. teaches that the actuators are air cushions (the pump is driven to pump air or liquid into the bag, this causes the bag to expand to an inflated position) (col. 4, lines 55-57).

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lampotang et al. (US Patent 5779484) in view of Le Roy (US Patent 4003141).

As per claim 10, Lampotang teach a medical patient simulator, in particular a simulator for simulation of an infant, comprising a head,

Lampotang et al. does not teach a head having one or more air cushions in at least one fontanelle area on the head of the simulator, which air cushion(s) is/are designed to be filled with air in order to simulate an increased pressure in the brain.

Le Roy teach a intracranial pressure monitoring device were a head has one or more air cushions (abnormal pressure creating means 30) (col. 4, line 7) also see (fig.2, element 30) in at least one fontanelle area on the head of the simulator, which air cushion(s) is/are designed to be filled with air in order to simulate an increased pressure in the brain (the supply of air or other suitable fluid through tube 36 creates a pressure in member 38) (col. 4, lines 16-17).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a head having one or more air cushions in at least one fontanelle area on the head of the simulator, which air cushion(s) is/are designed to be filled with air in order to

simulate an increased pressure in the brain as taught by Le Roy for the purpose of enhancing the apparatus of Lampotang et al. for a more accurate simulation of the dynamic condition occurring in the body during a traumatic occurrence.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to QUINTIN LATHAN JR whose telephone number is (571)270-3846. The examiner can normally be reached on Monday-Thursday Alt-Friday 7:30 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Nguyen can be reached on 571-272-1753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

QJL
/Taghi T. Arani/
Supervisory Patent Examiner, Art Unit 4193
4/26/2008